

CALIFORNIA GARDEN

Miss A. M. Rainford
117 4th St.
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One Dollar

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Ten Cents

February Planting Notes
"Oh, Take up the Shovel and the Hoe"
School Bulletin No. 6
Chickens and Flowers

CALIFORNIA GARDEN

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The California Garden

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POINT LOMA, CALIFORNIA, FEBRUARY, 1914

No. 8

This matter belongs in the managerial department, we know, but in the Garden it is not unusual for the Editor to butt in where the Manager fears to tread, and vice versa. So much by the way of preface for those who will be glad to find that we are not progressively departmental, and hardly desire to be, with the fervor of some of our local bodies.

It is apparent that under our present economical system, which is mainly founded on the principle of "paying for nothing but actual printing and mailing," our volunteer workers can hardly be expected to be what modernity calls "live wires" in soliciting advertising. Further, that only space sufficient to cover unavoidable expenses, can be given to advertising. Now it appears to us that our value as an advertising medium has been enormously increased, likewise our opportunity, by the advent of the Parcels Post, which has made possible the delivery to our doors of, not only plants and trees, but even the common garden appliances. We have read of an ordinary plow wending its way from the factory to the farmer, franked by a postage stamp. We give notice that we are going to take this turn in the tide at the flow, and have apportioned out our advertising space among various businesses. For instance, we have a page for a Department Store. If it be contracted locally, so much the better, but if not, the Parcels Post has largely removed the distance embargo and we must try the houses further afield. We have had one outside firm after our rates to advertise garden hose by mail. There is a page for the Hardware business. One of the largest seed houses in the country is considering a page. etc. etc.

This is not in any way a "play off" scheme. It is merely a statement of our program. We have come to recognize that the advertisers must be shown the "must" in the argument, and also that a large per cent. of advertising is shot into our publications by a compelling charge of reason. We expect to unmask our bat-

teries right away, with faith in our cause. We personally don't get a thing and we believe the advertisers will. We also should say that we have figured out, that though we are a garden paper, our subscribers live in houses, wear clothes, and need food, just the same as anybody else, and we have no reason to suppose that they depy themselves any one of the million other unnecessary things that the rest of the world buys. Now don't be "out" when we call, because we may have forgotten all about this by that time and are on a legitimate purchasing expedition.

Let us be thankful for the rain and prepare for a dry summer. So long has it been the gentle shower that came down that when a real downpour eventuated we tucked up our pants, waded the floods, and afterward took an inventory of the damage with a broad grin. As a matter of fact we San Diego folks cannot conceive of too much rain, as we very largely live on hills and our natural drainage system is simply immense. We remark thus shortly on the weather because having lived in these parts a quarter of a century, we know it is the right thing to do, and we make this explanation only for the benefit of our readers who live where the climate is unmentionable.

We have had a pleasant surprise; a gardening concern wrote us in the most naive manner, "Would an advertisement in your paper do us any good". It put us up against another angle of this advertising question. We honestly believe that such an investment would do this particular concern a great deal of good, but is it our business to say so? Is not this party taking us at a disadvantage? We know it would be very good for California Garden to have this advertising and so we will confess, but there we must stop. Has our simplicity our absolute infancy in business ways become so apparent that we can be seriously asked to appraise our own wares. This is one of the greatest compliments

ever paid to this magazine, and if the complimenter does come into our columns it is a Crawford peach to a wonderberry that the volunteer staff will see that he is made whole, such is the inconvenience of a working conscience.

We have been taken to task because in the past we suggested that there might be something slightly effervescent or bubbly about the Spineless Cactus, nevertheless we are impelled to refer to a report issued by the U. S. Government of a two years' test of the Cactus diet on Cattle at Brownsville, Texas. We cannot give all this report and perhaps it would not be fair to make extracts to support our own view, but a

copy should be obtained by everyone before accepting the most startling statement made by sellers of slabs at so much per, however, this paragraph will show that just at present some of the old forms of fodder should be retained.

When compared with other common roughages in Southern Texas the pear (cactus) was found to have the following relative value for the production of milk fat:

1 lb. sorghum hay equal to 10.1 lbs. of pear.

1 lb. sorghum silage equal to 3.3 lbs. of pear.

1 lb. cottonseed hulls, equal to 8.8 lbs. of pear.

Horticultural School for Women

The Pennsylvania School of Horticulture for Women, at Ambler, Pennsylvania, has sent out a very interesting and pleasing announcement of their school and its work.

The following is copied from the general foreword:

"A special School of Horticulture is needed for the increasing number of women who wish to be able to combine their occupation with their home life, and for those who are looking for newer, wider fields of remunerative activity. As a rule, women who entertain these ideas already possess an academic or collegiate training along general lines. They desire to live in the country and have an occupation, but do not wish to invest capital nor to enter upon a definite industry without that special knowledge and training necessary for success in any undertaking.

All wealth is derived primarily from the soil by the application of directed energy and there is no occupation more honorable, independent or interesting than the profession of horticulture. Not only does it afford opportunity for financial gain and contribute abundantly to the health and happiness of the individual, but, in the study of natural science, it opens up a broad field for intellectual life. Further, the extension of horticultural

activities in America is desirable and necessary; and those who engage in the work are contributing directly to the general welfare of our people.

England, Germany, Belgium, Italy, Denmark, Russia, all have schools of gardening for women which have long passed the experimental stage and now have a recognized position in the educational world. Some of the graduates are managing their own estates, others have found responsible positions as managers of private or public gardens or of commercial work, as consulting horticulturists, or as lecturers. In America, only a beginning has been made toward providing special training in horticulture for women.

No more healthful and suitable occupation for women of education exists than is offered in the field of horticulture. Women have been successful as florists, market gardeners, proprietors or managers of fruit farms or orchards. There is a growing demand for managers of private estates or of small farms and for supervisors of home and school gardens. Such positions command good salaries. So far, the schools of horticulture in America have been unable to meet the demand for trained women for these lines of activity.

In England, where colleges of horticulture for women have existed for several

years, the increase in the number of professional women gardeners has been remarkable. Especially in glass gardening women are found to be more attentive to detail than men, and psychologically well adapted to care for the growing plant, which needs an almost maternal affection. Dr. Hamilton, of Studley College of Horticulture for Women, states that some women gardeners in England are making over

a thousand pounds a year, and many others make large profits."

This college offers a two-year course of study at a cost of \$425.00 a year, which covers board and tuition.

Is there any reason why San Diego should not begin to think and plan for a similar school for her women?

Shall the California Garden discuss this subject seriously?

"Oh, Take up the Shovel and the Hoe"

Alfred D. Robinson

Likewise the rake, and don't think because it has rained that the Almighty is going to take your garden off your hands. It seems almost foolish to take up our limited space with the simple things that everybody knows, and yet what everybody knows only a few practice. The dry farming bee that is buzzing so vigorously just now is merely insisting on our putting our experience to work. Everyone who has cultivated a square foot of ground in Southern California for more than one season, and has exercised ordinary common judgment, knows that cultivation is the one great thing that he can do to help nature and work on with her. As a general principle without cultivation, irrigation, fertilization, etc., are worthless. The principles of dry farming as now put forth were in the main applied to all orchard cultivation twenty-five years ago. In the fall the ground was plowed to the trees and left open. In the spring it was plowed back and thereafter the cultivator ran through it all summer, so that at all times it had a perfectly pulverized mulch of from three to four inches. There were thousands of acres of orchard that were kept in this stirred condition for years. The writer did a lot of the stirring, and probably some one is going over the same ground in the same way today. One of our greatest rose authorities says if he had to give up watering or cultivating, he would let the watering go.

The reason for all this preliminary respect, is to try and emphasize the value, nay, the necessity, of a thorough working

up of all the garden ground. Not a scratching of the surface, but the turning of the soil a foot deep if possible. The character of our ground and the way of our climate, both favor a running together of the soil into too solid a mass for favorable vegetable growth. In my garden I had last year a long row of larkspur. These I wished to remove this spring, and even after the plentiful rains, found the ground around them almost impenetrable by a spade, yet they were carefully cultivated. There is reason to argue that all perennials might benefit by being dug and replanted each year. Though the wheel hoe has been a wonderful labor saver, and vastly multiplied the man power so far as covering space is concerned, it has the disadvantage of packing the ground at the limit of its somewhat too shallow cultivation, and it must not be considered as rendering unnecessary at least one thorough spading in a season.

Soils differ vastly in their workability, if I may be allowed that term. The sandy kind can be worked almost directly after a rain, or when dry or any time between, whereas the adobes respond satisfactorily only at just a certain stage. They cannot be touched before, they are so sticky, nor after, because they are so stiff. As a general principle these stiff soils are far richer than the amiable ones, and repay the extra trouble; moreover, they hold the plant food put into them far longer. This variation in soil is peculiarly a San Diego problem, as a resident once stated that there was not within the very comprehensive city limits one forty-acre piece with the same soil character throughout. Please

observe that he said it. I don't, for I have not inspected all the area.

San Diego is to be favored, let us hope, with a County Farm Adviser—One of those wise ones who can tell you where your soil lacks, and the remedy. This official has a boundless field of endeavor in

which to work, and the right man can be of inestimable value. However, when you consult him let him inspect all four corners of your garden as he may find it necessary to write you just that many prescriptions, and in the meantime dig and be glad you can do so.

The February Garden

By GEORGE P. HALL

Next to April and May, February has the longest planting list to supply the demand for provisions of the future extended list of garden productions. One should be particularly careful in regard to providing for proper germination of seeds. The year thus far has been quite propitious in its supply of surface moisture and in well cultivated gardens and fields the moisture has penetrated a good depth, but where the soil was left untouched much has been consumed in surface requirements, and for the sure germination of seed there must be more than a few inches of surface moisture. In making the seed bed, or in sowing in drills in the open, the soil must be previously soaked to the depth of a couple of feet and after letting water run slowly for time enough to accomplish this object, the water should be turned off and after a few days the soil thoroughly stirred, raked smooth and allowed to dry on the surface before planting the seed, so you can have dry earth to cover the seed over with after sowing it, in the well dampened drill. This condition will obviate the dangerous conditions to the seed of not either having enough moisture beneath or of having muddy conditions on the surface which is fatal to the germination of the seed. Seed should be lightly pressed into the moist soil you have previously prepared and then the dry surface soil drawn over to cover the seed. There being sufficient moisture beneath to come to the surface it will start the seed to grow and if neither water nor mud is allowed on the surface the seed will come through to air and light. If by any chance it is too dry, or drying winds come, run water slowly beside—not in the row—and it will soak

out to assist the young plant to struggle into life. So much seed is wasted and disappointment gathered by these two fateful conditions of either being too dry or too muddy when seed is sown.

You can begin at the top of the list and put in asparagus roots, beets of all kinds, both for table and stock, the Egyptian varieties for table, including Basinos, half sugar rose, for stock, along with Golden Tankard, are great producers. Continue the cabbage family. They like attention at this season, there has been a plethora of cauliflower, but you will want some later and the Brussels sprouts and Chinese cabbage for chickens will be all right. Carrots, cress and chives, if you like them, will all go in right now and kale and kohlrabi along with turnips will be better than put in later than next month. Corn salad, lettuce and a succession of peas, all kinds, especially the wrinkled sorts. Onion sets go in well and seed also, if you do not drown it out with too much water in the row.

This is potato month. Plant white varieties, except a few Early Rose for home consumption, White Rose sells best, as do all white varieties. All the warm weather vegetables like to be thought of and provided with either a hot bed or a well sheltered nook where Jack will not make goo-goo eyes at them. Tomatoes, peppers, eggplant, and all the cucumber, squash and melon family, think it is going to be an early spring and they want to be on the job as soon as you can get them started, and kept from catching cold, ready to run a fine business. Don't plant any of those green paschal celeries unless you have ample means of blanching them white. Green celery is alright for soup but everybody

doesn't want soup. Don't plant too large a patch of corn but to have some in early so the butterflies can lay the early worm crop in it, will catch them so the next will be better if you destroy the first crop of "worms." Get a catalogue from your home dealer and see just what you want and aim to have a succession of plantings so as to have a procession of gathering.

Pickings and Peckings

By The Early Bird

I shall have to pay Coronado a visit in May next to see if those poppies that are reputed to have been sown from the Ferry to the Hotel are doing any good. It seems a pity that the mixed wild flower seed was not used as then, beside a sufficiency of poppies, for they always come, would have been a lot of other things that are very much worth while, but in view of the spirit of the times one ought certainly to be supremely thankful for just poppies, and not ask any more just yet.

I have been pulling weeds out of my wild flower patch, as a matter of fact have done it more than once, but refrained from mentioning it earlier in the season lest it might scare some from planting who thought they had struck an easy garden method. The wild flower will come with weeds but they do better without them. I know it will be objected that no one weeds in the wilds, which is true, but certain peculiarly obstructive specimens follow on man's land operations, notably one known as the pig weed. I am unaware at this writing and I don't intend to hunt through authorities to find out, whether it is called "pig" because that animal has a fondness for it, or because it has a connection with man. There are times when one could call the appellation appropriate in either case.

Crawling over the ground I hunted particularly the pig weed, ice plant and that all-covering half climbing thing with a small leaf and a tiny white flower. I cannot call it by name but everyone will recognize it as the thing that would have as many roots as stems if it had not so darned many stems, and that never can all be pulled at one trial, and which also has its root just to one side of the place you thought. I almost hated to pull even these

because the earth was moist and the sun warm and the business of growing so actively in operation everywhere, moreover it dawned on me that a weed is merely a growth out of place and might be desirable somewhere else. I have seen the ice plant most gloriously exemplifying its right to exist by covering bare spaces with a luscious green, and yet it spells death in my wild patch to all the tender things around. I almost apologized for every uprooting and wished I were a Mohammedan and could satisfy my soul with the formula, "In the name of Allah". Say, but that weeding is an interesting process. It begins tempered with the fear of soiled clothes and rough skin, but such trifling matters are soon forgotten and the absorption of identifying the pushing seedlings; the rescue of a delicate specimen from an encroaching ice plant or the detection of that sturdy ruffian, the pig weed, trying to hide and pass as something worth leaving is very complete and satisfying. We have an occasional clump of oats that came in with the fertilizer, we even pass by an alfileria, we discard the gloves we wore at first, and instead of gingerly stooping and skipping round all very damp and dirty looking places, we sprawl on all fours and embrace our mother earth and know a sane healthful joy that can be found in few other ways. That is, we do so if we really are of the garden folks, and if we can't do it, we are to be pitied, but the bald fact is we had better play bridge and dance the tango.

I started talking about the poppy planting at Coronado, wouldn't it be great if the powers that be conceived it would be a proper advertising stunt to beautify the golf links and polo grounds there with masses of the California wild flowers? I have not flown over there for a long time but I venture a guess that a thousand dollars planted in this way would bear a harvest of beauty that would win a world-wide notoriety, and then most any individual would have some fun out of producing so lovely a thing. My if I were something more than a bird.

The Garden has just received a fresh supply of Rosecroft seeds, including sweet pea, larkspur and dahlia. A packet of these choice seeds is given with each new subscription as long as the seeds last.

PLANTING NOTES

By K. O. SESSIONS

The time to make good and quick sales of rosebushes is when the roses are in full bloom. Likewise bulbs would sell best in bloom, but that is not the best time to plant rosebushes nor bulbs, nor anything else—when it is in bloom. We all know better than to try to buy peach trees when peaches are ripe and we must think of plants in bloom as we think of a fruit tree bearing fruit.

In order to have plants in bloom in February, you must plant seeds, or bulbs, or roots from three to four or five months

they thrive and grow best if set out now, after a reasonable pruning.

The list must be made a general one:

All kinds of roses; all kinds of deciduous fruit trees, deciduous shrubs and deciduous vines and the hardy evergreen shrubs; established, but small, annual plants of pansies, stock, forget-me-nots, etc.; also seeds of scarlet flax, asters, mignonette, cornflower, scabiosa and salpiglossis.

The next forty days will be the best planting days of the year for this class of



Floral Association Planting Wild Flowers

before February; that is, in August, September and October.

This mild climate of ours is at variance with our inherited ideas of gardening, and so we get in a lazy sort of habit of planting whatever we want to, whenever the spirit moves us. It can be done, but it costs a lot more money and the plants do not thrive as well.

At this time of year all plants in a dormant condition are in shape to be transplanted. They don't look inviting, but

plants. So think over what you want in this long list and set the plants out.

Later, about March 15th, another class of plants can be planted with best results. These will be the soft-wooded perennials, such as heliotropes, pentstemons, streptosolens, lantanas, solanums, geraniums, larkspurs, verbenas, border plants, dahlias, ferns, begonias, poinsettias, fuchsias. Also citrus trees, olives and acacias.

Then about May 1st, we can begin to plant out the tropical and semi-tropical

plants, of which we can make quite a long list. Hibiscus in variety, bougainvilleas, palms in variety, bamboos, smilax, asparagus, pleroma.

Any shrubs or vines not previously planted can be set out at the same time, before the warmer weather is at hand, and they will flourish.

The deciduous shrubs that are popular here are the lemon verbena, syringa, bridal wreath spirea, hydrangeas, althea or Rose of Sharon, fuchsias.

Deciduous vines are principally the wistarias, Boston ivy, Virginia creeper, mandevillea.

The hardy evergreen shrubs are the leptospermums, melaleucas, laurustinus, eugenia, abelia, coprosma, escallonia, raphaelepis, genista or broom, both the yellow varieties and the rarer ones with white blossoms; pittosporums and calianthas; the marguerites in variety, white, double and single, yellow, and small blue ones for broad borders or clumps.



The Lath House



What are you going to have in your lath house this year? The same old things, or what may be left of them, or are you going to think ahead and try for improvement? While you are thinking about this and trying to decide whether it really is worth the trouble after all, it may be as well to remind you that even as big a rain as we had at the end of last month, goes only a short distance with things in pots and hanging baskets. It can only serve as one right good watering, and even if the ground be soaking wet, still the growths referred to may be suffering for moisture. It must always be remembered that when you pot anything you elect yourself its foster parent and you have a baby on your hands. All signs point to an early season. The Maidenheads are covered with new fronds, and the begonias have started into growth. In fact *Odorata alba* has never stopped growing. This means that the lath house must be regularly attended. Where ferns have not been repotted, they will benefit by weak liquid fertilizer once in three waterings, and these kept-over pots dry out much the quickest. Again, it must be emphasized, never use fertilizer on a dry plant. How about tuberous begonias? They may be started up on moss or sand next month, and you will have to get them before you can start them. More about their culture will appear in the next Garden, but now it is urged to get some tubers. Remember how effective the hanging basket of these plants was at the last fall show. At the Rose Show a few Rex begonias appeared again and certainly we

have neglected this wonderful plant of late years. It has gone out of fashion all over the country, so much so that many nursery folks have ceased handling them. However, they should have a place in our lath houses, so put them on your list in spite of the fact that they are not overly easy to grow and have moods without apparent rhyme or reason. Then there are the ever satisfactory coleus. Get a package of seed and plant it in a box in a South window and raise one hundred plants, all different, for a quarter.

Best news of all, if it be true, and it is freely endorsed, an easy growing form of Maidenhair *Farleyense* has appeared, called *Farleyense Gloriosa*. Listen to this description: "This new variety, which is identical in every particular, has a stronger constitution and may be successfully grown under the same conditions as any ordinary form of the Maidenhair." Many of the Maidenheads grow like weeds in our lath houses, if freely watered, especially as hanging baskets, though they will not long survive in our dwellings, so we may hope to grow a *Farleyense* after all, and it is surely the Queen of all the *Adiantums*.

It is surprising how limited our local collections of ferns are, and it certainly would repay some of our amateurs who have lath houses to make a specialty of these fine ladies of the vegetable kingdom—they are the real lace there. One of the best known nurserymen in the States advertises 75 distinct ferns for \$7.50. There is a good sized and cheap start.

The Rudiments of Gardening

Official Bulletin No. 6, Issued under Direction of Prof. H. J. Baldwin, County Superintendent of Schools
Teachers will use contents of these Bulletins for their regular classwork in Agriculture

"Quiz" in Agriculture

By **GEORGE P. HALL**

President Little Landers Colony, San Ysidro, Cal.

POTASH AND LIME

Q. What crops are most benefited by the use of potash?

A. Potatoes, both white and sweet, and fruits of all kinds are improved in flavor and appearance, also meadow and clover.

Q. What soils most need potash?

A. Sandy soils are often deficient in this element.

Q. From where do we get our chief supply of potash?

A. From Strassfurt, Germany, where it has been procured from mines since 1862, and the supply seems to be inexhaustible. In the early days it was obtained chiefly from wood ashes, large quantities of timber was burned to secure it.

Q. Is there more than one form of potash?

A. Yes, one form is combined with chlorine to form chloride of potassium, most generally known as "muriate of potash"; the other form in which potash is combined with sulphuric acid is called "sulphate of potash."

Q. What is Kanit?

A. Kanit is the only crude product and is combined of different salts, chiefly, "chloride of sodium" or common salt, "magnesium chloride" magnesium sulphide" and "potassium sulphate". It however is not rich in potash, containing only about twelve per cent.

Q. Is there any other form of potash?

A. Sylvanit is another form of the crude salts and is used chiefly as a solvent of other materials in the soil. It is also believed that the magnesium contained in it is a direct plant food.

Q. Are the soils of California in much need of potash?

A. Most of the soils except those of sandy texture are well supplied with potash.

Q. Which contains the largest per cent of potash obtained from the German mines?

A. Muriate of Potash, which contains

fifty per cent potash, the principal impurity being common salt, and the lower the content of potash the higher the content of salt.

Q. Is there a better form of potash to use?

A. Sulphate of potash or "high grade" is preferable to the muriate, as it has a more favorable influence on crops and fruit. Double sulphate of potash, in addition to the potash, contains thirty per cent. sulphate of magnesia and is called "double manure salts", and is the most expensive form.

LIME

Q. Of what use is lime in the soil?

A. Its action as a fertilizer is direct and indirect. In soil derived from granite, mica, sand stone, slate and shales it has the direct effect to supply plant food.

Q. Has lime any physical effect on soil.

A. Lime renders heavy compact soil looser in texture and in light soil has the effect to bind loose particles closer together.

Q. Can lime be used injudiciously?

A. Lime without the help of other fertilizers may prove injurious. It should be used with caution, as it may have the effect to solidify soil, as lime and sand under certain conditions form cement.

Q. What plants are benefited by liming the soil?

A. Beets, spinach, lettuce, okra, vegetable oyster, celery, parsnips, onions, cauliflower, cantaloupes, asparagus, cabbage, Swedish turnips and all vegetables not mentioned in the next paragraph.

Q. Are there any plants slightly or directly injured by the application of lime in the soil?

A. Cotton, tomatoes, cowpeas, radish, castor beans, flax, Concord grapes, apples and pears, blackberries, raspberries and velvet beans.

Q. Are there different forms of lime?

A. The kind of lime for agricultural use is quick lime which should contain 90 per cent lime. The most concentrated form is gypsum or "land plaster", in which the lime is in the form of a mild sulphate. Limestone and chalk is a mild

form of carbonate of lime and is often seen cropping out in hill sides from where it can be obtained. Wood ashes contain 30 per cent lime, and waste lime from gas-houses is used.

Q. How much lime is required on an acre, and how often.

A. It depends somewhat on the nature of the soil, but generally on soil that can be benefited by liming from $\frac{1}{2}$ to $1\frac{1}{2}$ tons per acre once in five years. Gypsum has

been found to be a valuable corrective of black alkali—epsom salts—in the soil.

Q. How should lime be applied?

A. It is best to spread on, plow in and cultivate the soil just in the season for plowing for winter crops in California. It requires some time to elapse before the lime can become available to the plant, hence should be thoroughly mixed in the soil.

The Trap Door Spider

When walking through the chapparal, where the ground is hard and of adobe, look sharply and may be you may come across the home of a trap-door spider. Unless the spider is out foraging, and the lid of his den stands open awaiting his return, you may hunt long before you locate his wonderfully hidden home.

He is an engineer, and miner, as well, and the work he accomplishes is simply marvelous. In the first place he mines a round hole in the rock-like adobe six or eight inches deep and about one and a-half inches in diameter. When an engineer wants to make an opening in the adobe he uses a drill and then calls gunpowder to his aid to blast out the hole. But the spider has neither drill nor gunpowder yet he mines out a hole so perfectly that it excites our wonder and admiration. Grain by grain he removes the hard rock-like earth and is second only to the ant in his industry. Down he goes into the firm adobe inch after inch until the well is eight or ten inches deep, perfectly round and the walls as smooth as if polished. He must prevent dampness entering and so he cements the surface of the walls with some substance as impervious as concrete. Then he lines the walls with a velvet-like coating to make the den snug and warm. His den must have a covering to not only keep out the rain but it must be so constructed as to defy the birds from finding it and prying it open with their strong bills. And the roof or door must be so carefully made

and to fit so snugly that it will not allow of the birds even getting the point of their bills into the crevice. And so wonderfully is this done that it is with difficulty that you can see where the door fits into the surrounding adobe. In fact there is no difference so far as the eye can detect, between the trap-door and the adjoining adobe surface, and the joint is so close that you can not insert the end of a slender pen knife.

If small dots of moss are upon the surface of the surrounding adobe surface, these same dots of moss are upon the surface of his trap-door to deceive the eye. Again it must be so strong that an animals foot or even the heel of your shoe will not crush in his roof. He gets this strength by covering the inside of his roof and making it rest securely upon shoulders fitted to the utmost nicety. Then again he must arrange a spring for his trap-door that will allow it to remain open when he is out foraging, and, if pursued, when he runs for his life from a hungry road-runner the door will snap to like lightning the moment he has entered. No spring hinge you can buy in a hardware store works more swiftly than does the hinge of his roof door. Were I to write for a week I could not describe all the wonderful things about the trap-door spider, perhaps next to the ant, our most wonderful insect engineer. Look up "Spiders" in your encyclopedia and when you next see a spider's web you will do so with greater interest than ever.

DADDY CRIS.

The Divining Rod--Why Not?

A. D. ROBINSON

Anything about water is welcome in these days, and a great deal that is purely of a personal nature has been floated on the water question, therefore no apology is needed for transcribing in full the following clipping from the daily press. A request has been forwarded to Washington for literature bearing on this subject, as a report is abroad that the United States Government also investigated the "dowsing" for water, as it is called, and failed to explode the theory. Why not put a dowser to work in Balboa Park and make the Exposition people let our Park Commissioners do a little experimental boring with some of that \$1,850,000 fund. It does not seem common sense to spend that sum of money on a Park that has no water supply of its own.

Here is the clipping:

After getting the laugh from our halls of learning and other scientific abodes for these number of years, the staunch believer in the power of the hazel switch and other divining rods has his faith vindicated by the august congress of German scientists, which in its turn was converted to the faith by actual and incontrovertible facts brought out by experiments.

The first congress for establishing the scientific value of the divining rod, which met at Halle the last week in September, says a cablegram to the Globe Democrat, closed by placing on record its opinion that it was a scientific fact that the forked willow or hazel stick, or even an iron or steel rod, in the hands of certain persons would indicate subterranean water sources and coal, potash and other mineral beds.

The French academy of science dodged the question last week, but the German congress at Halle decided that, in view of the mass of evidence obtained during the two days of successful experiments in the vicinity of the place where the meeting was held and elsewhere, under conditions which precluded any fraud, science could no longer deny the results that have been achieved.

The first experiments were made near Schoenbeck, where a bed of rock salt and two beds of potash were located by the divining rod. Mineral charts afterwards proved the correctness of the work of the divining rod. At a point near Esileben a subterranean stream was located by a rod. Boring at the spot showed that the rod was right. A brown coal bed was located near Koethen by the rod and the location of a second bed was indicated, but the borings at this point have not yet been completed. Water was located in a large orchard where much money had been spent

in a vain effort to find a supply and where the proprietor had given up hope of obtaining any.

The next experiments were made with the divining rod in the hands of persons who were not familiar with the country to see if they could locate underground pipes. An attempt to indicate the pipes of the Halle water supply was only partly successful. The rod moved in various directions and those who held it claimed that numerous streams crisscrossed under the pipes.

At a point near Durrenberg the experiments in the same line were most successful. The divining rod quickly located the pipe lines. Affidavits were submitted from the engineers of the Munich city water department testifying as to the value of the divining rod in locating subterranean leaks in pipe lines which were not visible. This testimony attracted much attention from the scientists.

The colonial office at Berlin placed much evidence before the congress which had been gathered in German Africa as to the value of the divining rod. Chief Government Mining Inspector Scharf of Halle managed the practical experiments. The report of the society shows that it now has 341 members. Steps were taken at the closing session to organize an international society of men in all countries for the scientific study of the divining rod. An executive committee to take the matter in charge was selected.

The following letter is self explanatory and is published to show the attitude of the U. S. Weather Bureau towards the so-called "dowsing." However, its contemptuous dismissal of the subject as obviously absurd and fraud laden, has not closed the matter, for now comes to San Diego a scientific chemist with a magnetic instrument to locate water. Which instrument he says has been successfully used by the British Government both in India and Australia. This instrument exists for us only through the report of an entirely sane and reliable friend and we hope to make its close acquaintance and report in detail.

Washington, D. C., November 6, 1913.
Mr. Alfred D. Robinson,
Point Loma, Cal.

Dear Sir:

Your letter of October 26, 1913, addressed to the Department of Agriculture, inquiring about publications on rain-making and the use of the divining rod as a means of locating water and minerals, has been referred to me for reply.

This Bureau has no pamphlets for distribution, dealing either with the problem of rain-making or with the use of the divining rod, and so far as I know there is no government publication for distribution on either of these subjects. This Bureau has looked into the claims of various persons pretending to produce rain by artificial means, and in every case has found, what simple reason would tell us before hand we would find, that the proposed methods were utterly futile. As to the divining rod, no one has yet given the faintest hint of a rational explanation as to why water or minerals could possibly be located by any such means. It is true, of course, that by boring at places indicated by the divining rod, one may find water, but that is because he is likely to find water wherever he bores.

These two things, artificial control of the weather, and the use of the divining rod to locate underground water, are regarded by scientific people as being probably the most obvious and most absurd utter frauds ever practiced.

Very respectfully,

W. J. HUMPHREYS,

Professor of Meteorological Physics.

LEARN GARDENING BY MAIL.

The people of San Diego should take advantage of the correspondence courses in agriculture now offered by the College of Agriculture at Berkeley. An announcement has been issued describing thirty-two courses, and others will be prepared when the need and demand for them is apparent. Each course deals with a particular branch, and the subjects are treated in simple and direct language, easy to understand.

Course No. 27 is on Home Floriculture and will be ready March 15. No. 28, Home Ground Ornamentation, will not be ready until June 1. Send to the College of Agriculture, Berkeley, Cal., for circular describing the courses. These courses are all free and mark a long step toward bringing the state institution to the very homes of its supporters.

STUDYING SOIL.

Land experts from the U. S. Bureau of Soils are studying the soils of San Diego County with a view to making recommendations to the government for the opening of lands to entry in the Cleveland National Forest.

STREET TREE COMMISSION

The City Council has appointed Hugo Klauber and G. T. Keene members of a "Street Tree Commission" to take up the work of beautifying the streets by planting trees, shrubs, etc., under the ordinance recently passed. The two men named are to choose a third member.

Mr. Klauber was largely instrumental in getting the State Tree Planting Act adopted by the City of San Diego. Mr. Keene is secretary of the San Diego Floral Association.

While the Commission has been appointed, no funds have as yet been provided for the carrying out of the work, and until an appropriation is made no actual work can be accomplished.

THE GARDEN SCRAP BOOK

Why should not everyone who is interested, but who does not know how to garden in California, keep a scrap book? Use the ordinary Mark Twain scrap book, reserving about four pages for each month. Any item in reference to the month could be clipped and pasted in its proper place and soon a very reliable garden book would be compiled. Personal and local notes should be added at all times, respecting the month and week.

WILDFLOWERS AT CORONADO

Coronado people are bestirring themselves in the matter of planting wildflowers. California Poppies have been planted from First Street to the Coronado Hotel. If this proves successful, they propose to plant as many vacant lots as the owners will permit. Carelessness of residents in tramping on the tender shoots is causing the trustees much concern.

ESCONDIDO FLORAL SOCIETY

A new Floral Society at Escondido is interesting itself in the tree-planting campaign, and is also arranging for a flower show in May. Rev. E. E. Ford, the president, is also chairman of the Civic Improvement committee of the Chamber of Commerce.

WATER BY DRILLING.

J. Edgar Halstead told the Ad Club recently that the back country might have an ample supply of water by drilling for artesian wells, and suggested that it would be the best kind of advertising for San Diego to demonstrate it.

The California Garden

Alfred D. Robinson, Editor
G. T. Keene, Manager

PUBLISHED MONTHLY BY

The San Diego Floral Association

Main Office, Point Loma, California
Secretary's Office, 1627 E St., San Diego, Cal.

OFFICERS AND DIRECTORS

L. A. Blochman, President
Miss K. O. Sessions, Vice-President
G. T. Keene, Secretary
Miss A. M. Rainford, John Morley, Julius Wangenheim
George W. Marston

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Elite Printing Co.  1627 E St., San Diego

FEBRUARY MEETING

The Floral Association will meet Thursday evening, the 26th, at 8 o'clock, in the new Theosophical Hall at Seventh and Broadway. Come out and see if you approve of it as a meeting place.

JANUARY MEETING

An adjourned January meeting was held Thursday evening, the 22d, at the Francis W. Parker School, upon invitation of Miss K. O. Sessions, and to whom is due the thanks of the Association for a very enjoyable evening.

The big open porches of the building were lighted with Japanese lanterns, and the auditorium was decorated with acacia boughs. As the guests entered they were given sprigs of acacia blossoms. Despite the threatening weather, about seventy-five attended.

In the absence of President L. A. Blochman, Mr. A. D. Robinson presided. Miss Sessions gave the principal talk on the subject of "Acacias." A few of the thoughts gathered from her authoritative address follow:

The acacia has grown greatly in favor in the last ten years, and several varieties are now well known in Southern California. One of the favorites is *Acacia Baileyana*, named after Prof. Bailey, of Cornell College of Agriculture. Experience here has shown that it needs heavy soil, good drainage and not too much fertilizer. It grows quickly and flowers

abundantly. The black acacia is well considered as a street tree. On any fast-growing tree it is better to plant a small tree rather than a large one, stake it and lead up a central stem. Keep headed in to make branches. For street trees trim savagely after they are through blooming and have made seed.

Acacia latifolia is one of the best trees for near the seashore, thriving in poor soil and with little water. *A. cyclopsis* is fine to spread over ground. Few insects feed upon it and they are fairly easy to control. February and March is a good time to plant.

Miss Sessions also exhibited several specimens of rare plants, among them being a *Dombeya*, a South African shrub with beautiful pink bloom, and also a pink-flowering eucalyptus.

The Association voted to make an exhibit at the Industrial Fair, the nature of it to be decided later, and also to investigate the matter of some part in the straw-hat parade.

Miss Smith, soprano, and Dr. Vierson, tenor, each sang two very pleasing solos.

At the close of the meeting tea and cakes were served, and the guests were given an opportunity of inspecting the school equipment, which seems to be remarkably complete in every department.

MARINE VIEW.

A ride through Marine View section shows wonderful improvement in homes and gardens accomplished within the past year. Many pretty residences now dot the hills and green lawns and luxuriant flower beds are not rare. One interesting spot is a sunken or hillside garden, running from a commanding ridge to the bottom of the incline, leading down by devious ways through little summer houses, grape arbors and various and sundry steps, past all manner of growing things. The whole hillside has a suggestion of Japan, and is interesting throughout, and the picture will no doubt be complete when the handsome residence is completed, which we understand is to adorn the top. The property belongs to L. G. Rose, now residing on Juniper Street.

The Youth's Companion tells of a new device for collecting and intensifying sound, by which it is said the vibration caused by water running underground may be detected from the surface.

The Rose

If further planting is to be done it should be pushed, for though much stock is now carried by nursery folk in boxes and pots, they do this to cater to the lazy people or later on to those in a deuce of a hurry. The ideal method is the planting of dormant bushes with bare roots that can be properly arranged and covered. Unless a change comes, and they do come in this land of infinite variety, 1914 will be an early season for roses. Almost everywhere they are pushing their buds and in many cases have considerable leafage. If pruning has not been done, it would be better to do it even now, than let the bushes go, and it will be easier to judge where to cut. Without rehearsing again all details of pruning this must be emphasized. "Don't cut unless you know why". As a matter of fact a gardener should be able to give a reason satisfactory at least to himself for all his operations.

Where pruning has been done, it is not too early to begin selecting the best buds and rubbing off the others. The considerations should be largely confined to allowing space for each growth so that they do not crowd or cross one another, and retaining the strongest. For good blooms this is as necessary as pruning, for the latter operation faces all the eyes that are left, many of which would have remained dormant without it.

Watch for aphids and apply your pet poison. Keep the ground thoroughly stirred, for it is a good year to practice dry farming, the rains have been so bounteous and well distributed.

If your ground has been very heavily fertilized and is heavy it may tend to sour, when lime, the real thing scattered over the top and then worked in will be a great help. It is a good thing anyway.

It is not advisable to use stimulating fertilizers such as nitrate, as the bushes are dangerously forward, and you don't want roses yet even if you think you do.

The Rural Californian says that Los Angeles has an ambition to make herself the greatest bower of flowers the world has ever seen, during the exposition year. Just the scope which they will take is not fully determined, but presumably one of the city parks will be utilized, and in addition conservatories with growing plants, and exhibition rooms will be kept filled with cut flowers during the entire year.

Wild-Flower Seed Planted

Well, that wildflower lot was planted February 2, with all due ceremony, and an appropriate sign proclaims the fact to all who pass the corner of Second and Robinson Streets.

The ground was first loosened with rakes, then the seed, ten dollars' worth, was mixed with dry sand, and broadcasted lengthwise and crosswise the fifty-foot lot, after which, it was harrowed in by horse-power.

The planting took about one and a half hours, from start to finish. One corner of the lot was adobe, and was still rather wet from the recent rains, while another corner was sandy and full of water. A part of the lot will have full sunshine, while another part will be somewhat shaded by the house on the south, so this planting will demonstrate how wildflower seed acts under varying conditions.

The badge of a Floral Association member is a flower worn somewhere on the person. If you see a man or woman wearing a flower you may rest assured that he or she is either a member of the association, or eligible to membership. Wear more flowers, and wear them every day.

A single cotton plant in the Imperial Valley bore three and a half pounds of seed cotton. It was ginned by the Department of Agriculture and the seed was returned and planted in fourteen rows this year giving a remarkable production.

The Floral Association showed its good will toward the straw-hatters by decorating an automobile with acacia blooms for the Straw Hat Parade, February 2.

Sir Oliver Joseph Lodge, of England, has an idea that in plant life may be found the key to the sex secret.

SOIL EXPERT

The Chamber of Commerce is interesting the farmers and gardeners in the Soil Expert movement, whereby the State pays the salaries of three expert advisers, if the various communities will band themselves together to pay their actual expenses in going from place to place. A meeting furthering this project is to be held in the Spreckels Theatre on the morning and afternoon of Friday, Feb. 20. The farmers must show an interest in this meeting if they want the cooperation of a State expert.

Chickens and Flowers

San Diego recently had a visitor who came and went unheralded. Only a few chicken men knew he was in the city, but they, as in duty bound, motored him up Grossmont and through the Exposition Grounds. This visitor was the greatest authority in America on fancy poultry. His name is Drevensstedt, and he lives in Buffalo, and spends all his time and very considerable talents in the cause of the thoroughbred chicken. When a question relative to fancy chickens comes up, the disputants say, "What does Drev say?" and what Drev says goes. Now the reason the visitor and his visit are mentioned here is that he seemed to be wonderfully interested in flowers, and in conversation again and again he referred to this and that poultry yard, the hobby of some wealthy man, as set in a garden. Though he did not mean to admit it, he let out a reluctant admiration for the English poultry and poultrymen, and the wide spread interest there in the show chicken.

Now, the day of the chicken is coming into high society. The steps can be easily traced thus: First the Harem, then the Childhood, then the Noah's Ark, lastly the Chanticleer. When this climax arrives will you be found wanting? Will the gauge you wear be just the plumage of any old fowl, or will you be thoroughbred? Will your conversation be out of the Standard of Perfection, which is the description of the ideal chicken in countless variety, or will it perforce be just of eggs, roasts and friers?

This is a utilitarian age. The germ theory is making the pet dog impossible, at least for the dog. Cats have long been known to carry the bacillus of something with a name longer than Mark Twain's famous German word. The horse has been honked almost out of existence. Logically the pet rooster shall have his day. In Belgium the wealthy have a race of Bantams with cute little beards and bootees. They are barred and spotted and are called Millefleur, which is surely an appropriate name for a garden. A few of these have come to America, but the Belgians have them, like them, and won't part with them readily, so to their other charms is added the final one of inaccessibility. Get ready for the Chanticleer series.

Robinson's Corner



OUR Cock-a-doo-dle-do for 1914 has been printed in the very best style by the Elite Printing Co. It contains the Crow of the Cock, the Lay of the Hen and our own very modest claim to the best ever in Barred Rocks.

Stimulated by it to supreme efforts, the Rosecroft hens are laying their darnedest, and over 90 per cent. fertility in the incubator just tested shows that the roosters are properly gallant.

You are invited to send for a copy of the above-mentioned and also to visit our yards in the *afternoon*. Do not come in the morning, for the hens are all on the nests laying.

You must not 'phone, we have no maid, and—but nuff said.

Rosecroft Barrea Rock Yards

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